

BookletChartTM

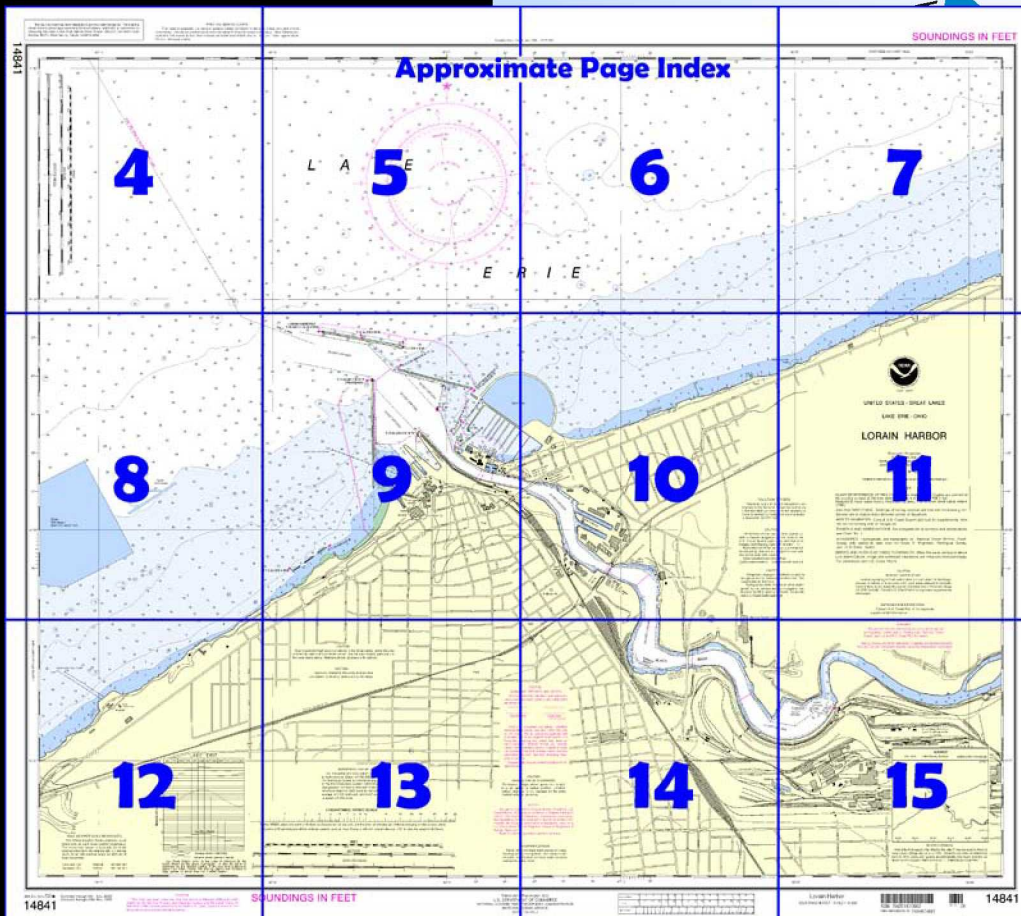
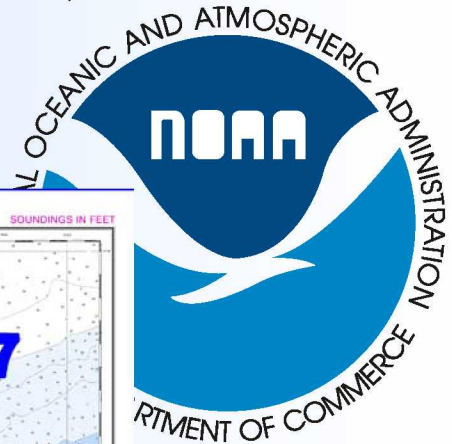
Lorain Harbor

(NOAA Chart 14841)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

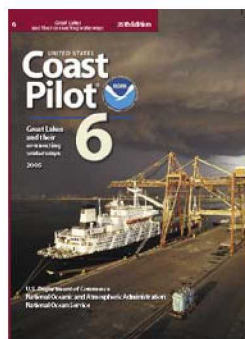
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 6, Chapter 6 excerpts]

(419) **Lorain Harbor**, serving the city of **Lorain, Ohio**, is about 25 miles W of Cleveland Harbor. It comprises the lower 3 miles of the **Black River** and an outer harbor.

(420) An unmarked **dumping ground** with a least reported depth of 35 feet is centered about 3.5 miles N of the harbor entrance.

Prominent features

(421) The ore docks on the W side of the mouth of Black River and the stacks of the powerplant 0.3 mile SW of the mouth are

prominent.

(422) **Lorain Harbor Light** (41°28.9'N., 82°11.7'W.), 60 feet above the water, is shown from a white tower on the W end of the detached breakwater on the N side of the entrance channel. A fog signal is at the light.

(423) The harbor is entered through a dredged entrance channel that leads

ESE from the deep water in Lake Erie on the S side of a detached breakwater, and then leads SE between converging breakwaters to the mouth of Black River. The mouth of the river is entered between parallel piers, and the dredged channel leads upstream for about 2.8 miles. A turning basin is on the SW side of the channel, 1.6 miles above the mouth and two turning basins are at the head of the project. In the outer harbor, basins are on either side of the entrance channel. From the S side of the outer harbor W basin, an approach channel leads SE to the municipal pier 0.2 mile W of the mouth of the river. Lights mark the ends of the breakwaters and the piers at the river mouth. Buoys mark the E limit of the dredged basin in the outer harbor.

(424) In April 2004, the controlling depths were 25.1 feet (26.7 feet at midchannel) to the Lorain Yacht Basin, thence 23.9 feet (except for lesser depths to 19.5 feet along the channel edges) to the 21st Street bridge, thence 19.2 feet to the head of the project (except for lesser depths to 17 feet at the head of the project.) The turning basin on the SW side of the channel, 1.6 miles above the mouth, had depths of 16 to 20 feet. The two turning basins at the head of the project, one on the N side and the other at the head, had depths of 14 to 18 feet and 6 to 10 feet, respectively. The depths in both the E and W basins of the outer harbor were 20 to 23 feet with lesser depths along the edges.

(425) A semicircular diked disposal area is on the NE side of the E breakwater. A floating breakwater extends about 750 feet at right angles from the SW side of the same breakwater.

(426) Several detached shoals are in the approach to Lorain Harbor. A shoal with least depths of 22 feet extends 1.4 miles from shore within 2 miles E of the harbor entrance. Several shoal spots with depths of 24 to 28 feet are from 1.4 to 2.4 miles N of Lorain Harbor Light.

(444) Marinas in Lorain Harbor are in the outer harbor E of the river mouth, on the NE side of the river just inside the mouth, on the E side of the river just upstream of the Erie Avenue bridge and further upstream on the N side, just past the railroad bridge. Gasoline, diesel fuel, water, ice, sewage pump-out facilities, and some marine supplies are available. A 50-ton travel lift is available at the Marina on the E side of the river, just upstream of the Erie Avenue bridge. Engine repairs are made at a boatyard on the NE side of the river just upstream of the Erie Avenue bridge, a 30-ton hoist is also available.

Table of Selected Chart Notes

Corrected through NM Jul. 19/08
Corrected through LNM Jul. 8/08

Polyconic Projection
Scale 1:10,000
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET

CAUTION
Improved channels shown by broken lines
are subject to shoaling, particularly at the edges.

CAUTION
BASCULE BRIDGE CLEARANCES
For bascule bridges, whose spans do not open
to a full upright or vertical position, unlimited
vertical clearance is not available for the entire
charted horizontal clearance.

CAUTION
Temporary changes or defects in aids to
navigation are not indicated on this chart. See
Local Notice to Mariners.
During some winter months or when endan-
gered by ice, certain aids to navigation are
replaced by other types or removed. For details
see U.S. Coast Guard Light List.

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed
below provide continuous weather broadcasts.
The reception range is typically 20 to 40
nautical miles from the antenna site, but can be
as much as 100 nautical miles for stations at
high elevations.

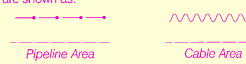
Cleveland, OH	KHB-59	162.550 MHz
Sandusky, OH	KHB-97	162.400 MHz

CAUTION
Limitations on the use of radio signals as
aids to marine navigation can be found in the
U.S. Coast Guard Light Lists and National
Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial
broadcasting stations are subject to error and
should be used with caution.
Station positions are shown thus:
○ (Accurate location) ◦ (Approximate location)

RADAR REFLECTORS
Radar reflectors have been placed on many
floating aids to navigation. Individual radar
reflector identification on these aids has been
omitted from this chart.

HORIZONTAL DATUM
The horizontal reference datum of this chart
is North American Datum of 1983 (NAD 83), which
for charting purposes is considered equivalent
to the World Geodetic System 1984 (WGS 84).
Geographic positions referred to the North
American Datum of 1927 must be corrected an
average of 0.133" northward and 0.452" eastward
to agree with this chart.

POLLUTION REPORTS
Report all spills of oil and hazardous sub-
stances to the National Response Center via
1-800-424-8802 (toll free), or to the nearest U.S.
Coast Guard facility if telephone communication
is impossible (33 CFR 153).

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine
cables and submarine pipeline and cable areas
are shown as:

Additional uncharted submarine pipelines
and submarine cables may exist within the area
of this chart. Not all submarine pipelines and
submarine cables are required to be buried, and
those that were originally buried may have be-
come exposed. Mariners should use extreme
caution when operating vessels in depths of water
comparable to their draft in areas where pipelines
and cables may exist, and when anchoring, drag-
ging, or trawling.
Covered wells may be marked by lighted or un-
lighted buoys.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 6 for important
supplemental information.

Additional information can be obtained at nauticalcharts.noaa.gov

Low Water Datum, which is the plane of reference for the
levels shown on the above hydrograph, is also the plane of
reference for the charted depths. If the lake level is above or
below Low Water Datum, the existing depths are correspond-
ingly greater or lesser than the charted depths.

SOURCE DIAGRAM
Most of the hydrography identified by the letter "J" was surveyed by the U.S.
Army Corps of Engineers prior to 1974. Channels currently maintained by
the U.S. Army Corps of Engineers are periodically resurveyed and are not
shown on this diagram. Refer to Chapter 1, [United States Coast Pilot](#).

WARNING
The prudent mariner will not rely solely on any single aid
to navigation, particularly on floating aids. See U.S. Coast
Guard Light List and U.S. Coast Pilot for details.

CAUTION
POTABLE WATER INTAKE
Vessels operating in fresh water lakes or rivers shall not discharge
sewage, or ballast, or bilge water within such areas adjacent to domestic
water intakes as are designated by the Commissioner of Food and Drugs
(21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental
information.

CAUTION
Due to periodic high water conditions in the Great Lakes, some features
charted as visible at Low Water Datum may be submerged, particularly in
the near shore areas. Mariners should proceed with caution.

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published
weekly by the National Geospatial-Intelligence Agency and the Local Notice to
Mariners (LNM) issued periodically by each U.S. Coast Guard district to the
dates shown in the lower left hand corner. Chart updates corrected from Notice to
Mariners published after the dates shown in the lower left hand corner are available at
nauticalcharts.noaa.gov.

Sailing courses and limits indicated in magenta are recommended by
the Lake Carriers Association and the Canadian Shipowners Association.

This nautical chart has been designed to promote safe navigation. The National
Ocean Service encourages users to submit corrections, additions, or comments for
improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean
Service, NOAA, Silver Spring, Maryland 20910-3282.

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given
thereon are in statute miles between points of departure.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations
see Chart No. 1.

AUTHORITIES. Hydrography and topography by National Ocean Service, Coast
Survey with additional data from the Corps of Engineers, Geological Survey,
and U. S. Coast Guard.

BRIDGE AND OVERHEAD CABLE CLEARANCES When the water surface is above
Low Water Datum, bridge and overhead clearances are reduced correspondingly.
For clearances see U.S. Coast Pilot 6.

PLANE OF REFERENCE OF THIS CHART. (Low Water Datum) Depths are referred to
the sloping surface of the river when Lake Erie is at elevation 569.2 feet.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum
(1985).

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental infor-
mation concerning aids to navigation.

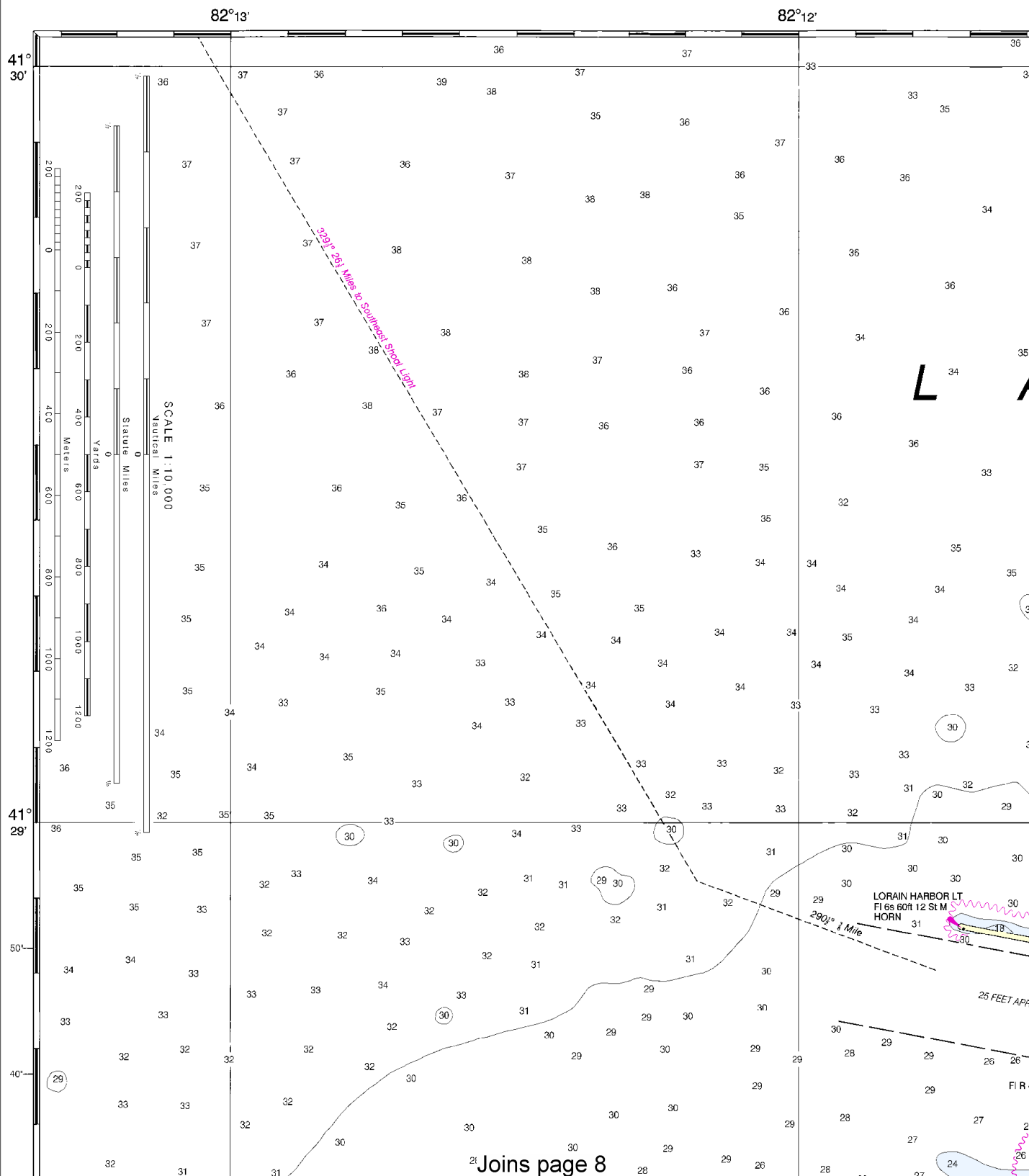
PRINT-ON-DEMAND CHARTS
This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical
corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are
available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about
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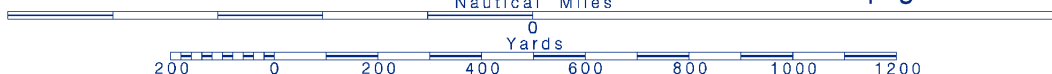
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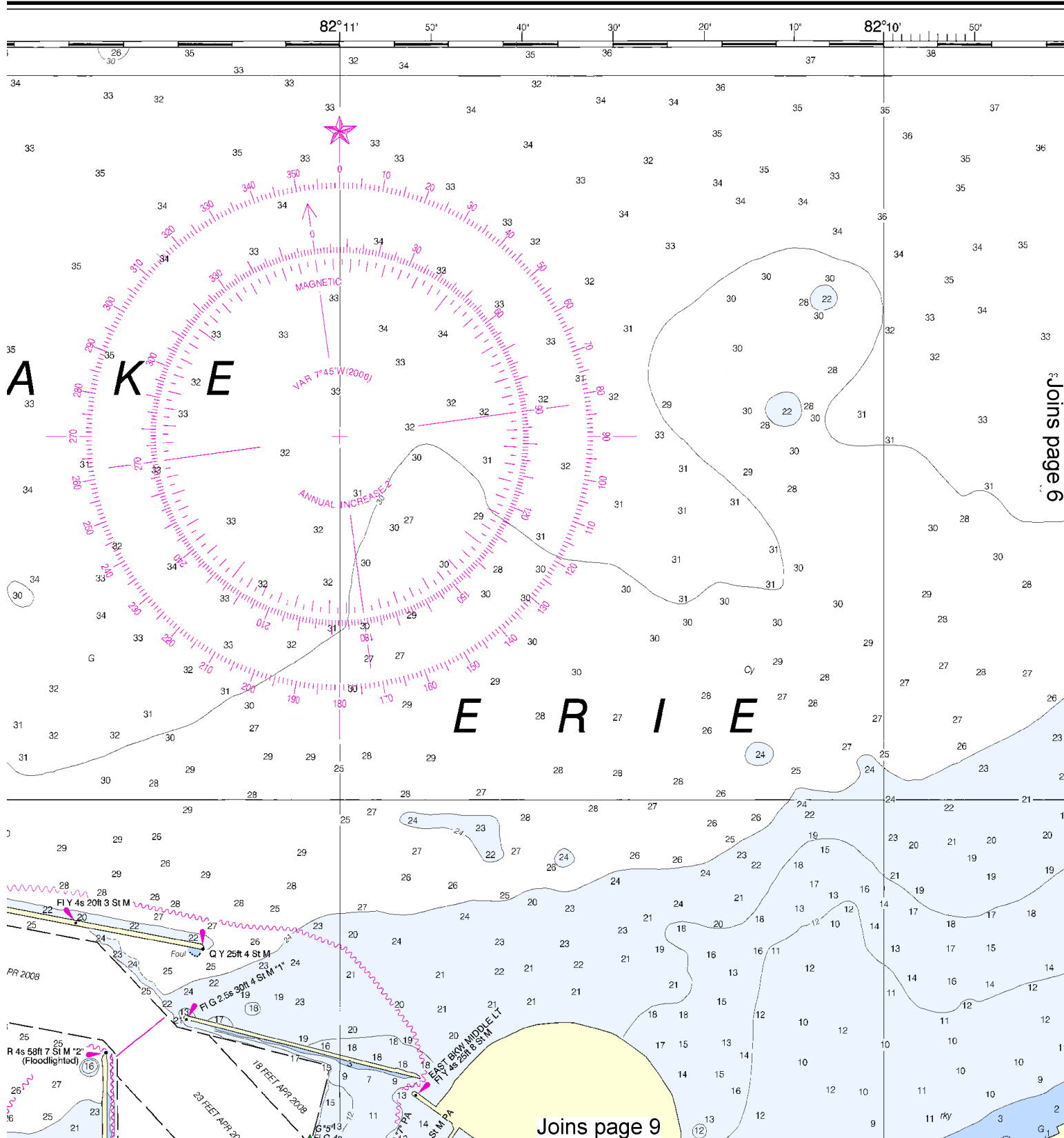


Printed at reduced scale.

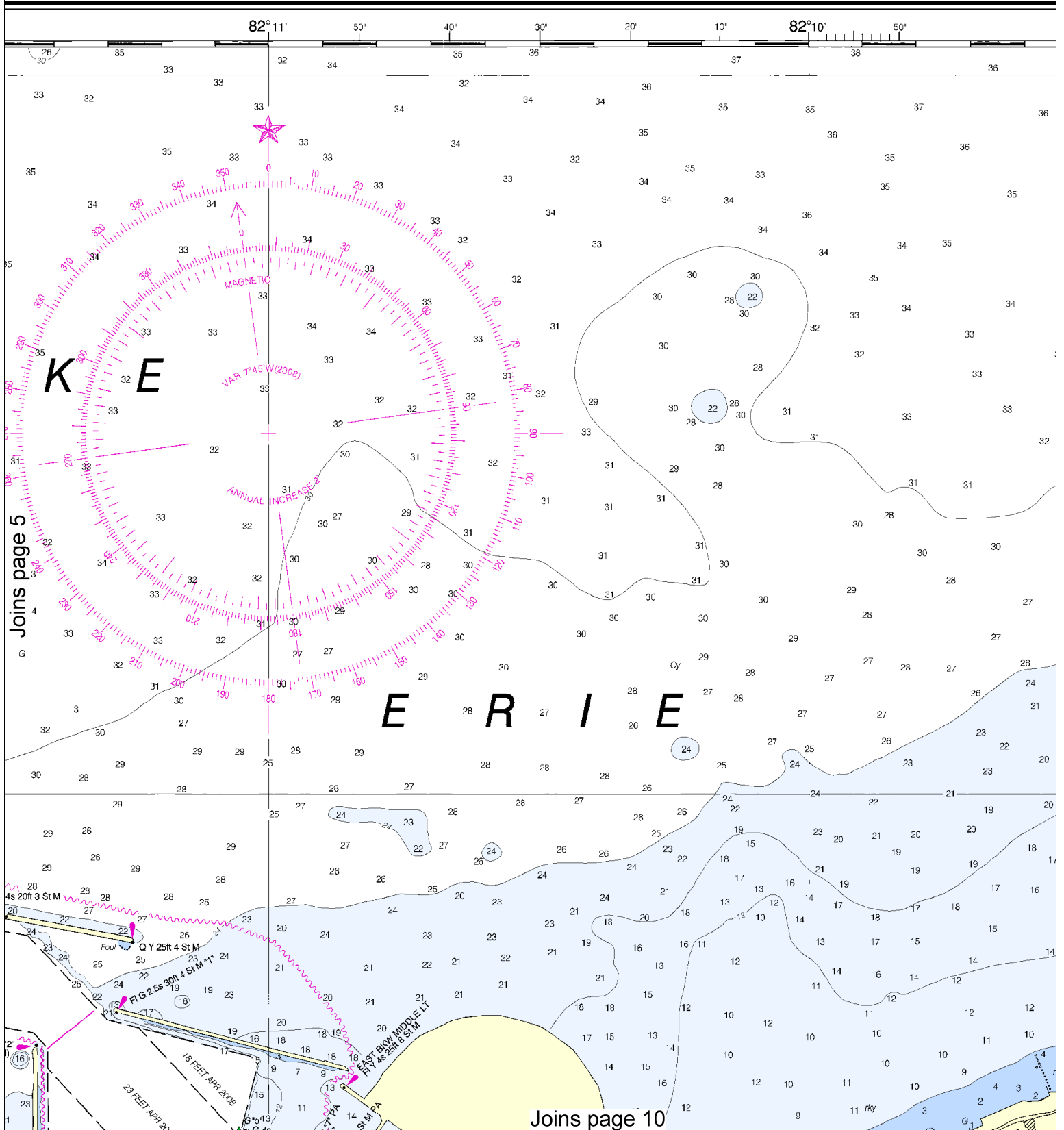
SCALE 1:10,000

See Note on page 5.





This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:13333. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



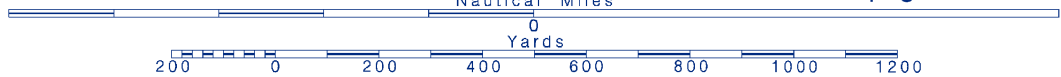
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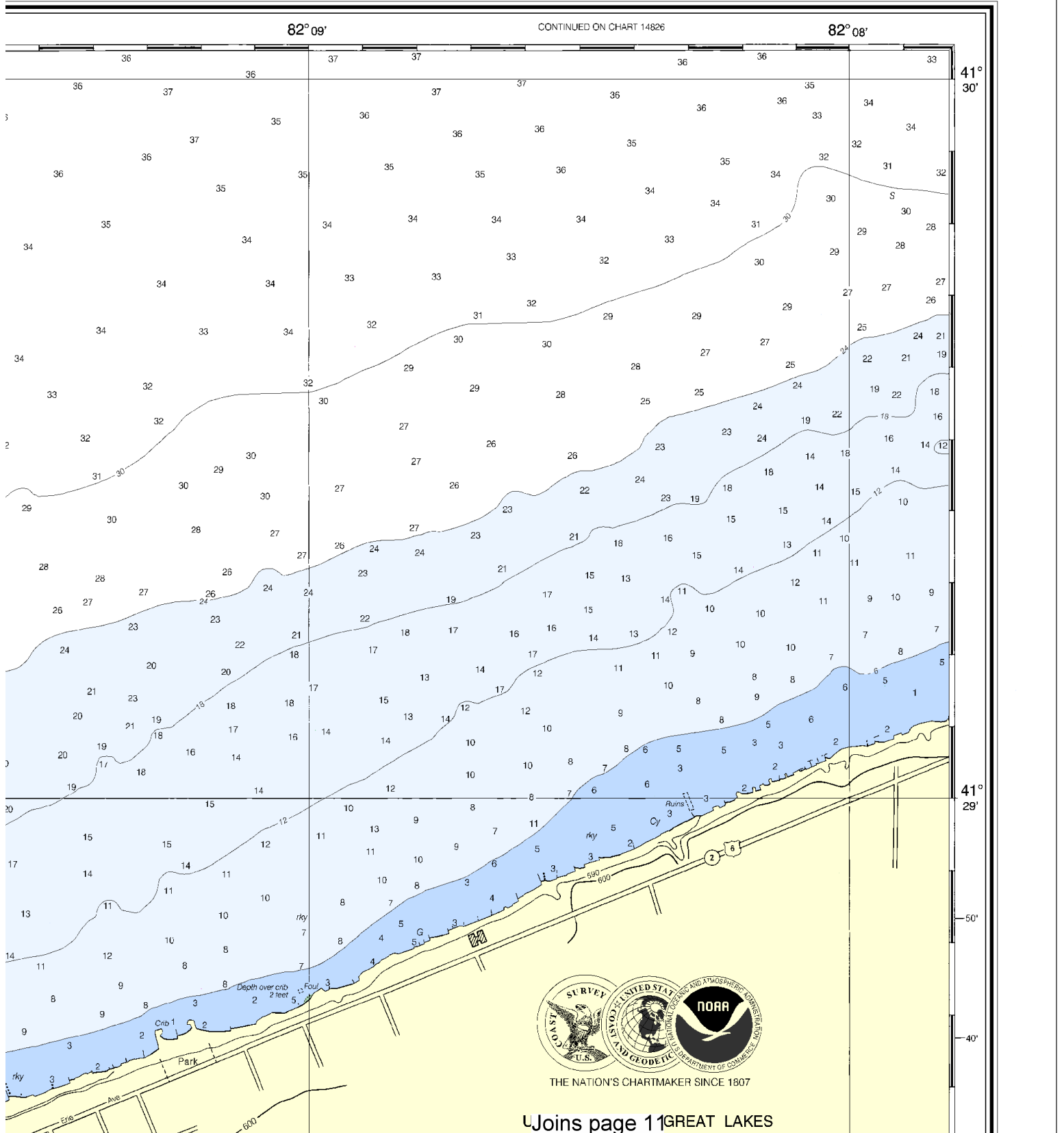
Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.



SOUNDINGS IN FEET



This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,
 NGA Weekly Notice to Mariners: 0910 2/27/2010,
 Canadian Coast Guard Notice to Mariners: 0110 1/29/2010.



Joins page 4

41°
29'

50'

40'

30'

20'

10'

41°
28'

50'

ED ON CHART 14626

Joins page 12

LORAIN HARBOR LT
Fl 6s 60ft 12 St M
HORN

290° 1/2 Mile

25 FEET APP

Fl R

Depth over crib 12 feet

Obstrn
Fish Haven
(auth min depth 15ft)

Obstrn
Fish Haven

Fl Y 2.5s 30ft 4 St M

LAKEVIEW PARK

CAUTION
Due to periodic high water conditions
charted as visible at Low Water Datum
the near shore areas. Mariners should

8



Printed at reduced scale.

SCALE 1:10,000

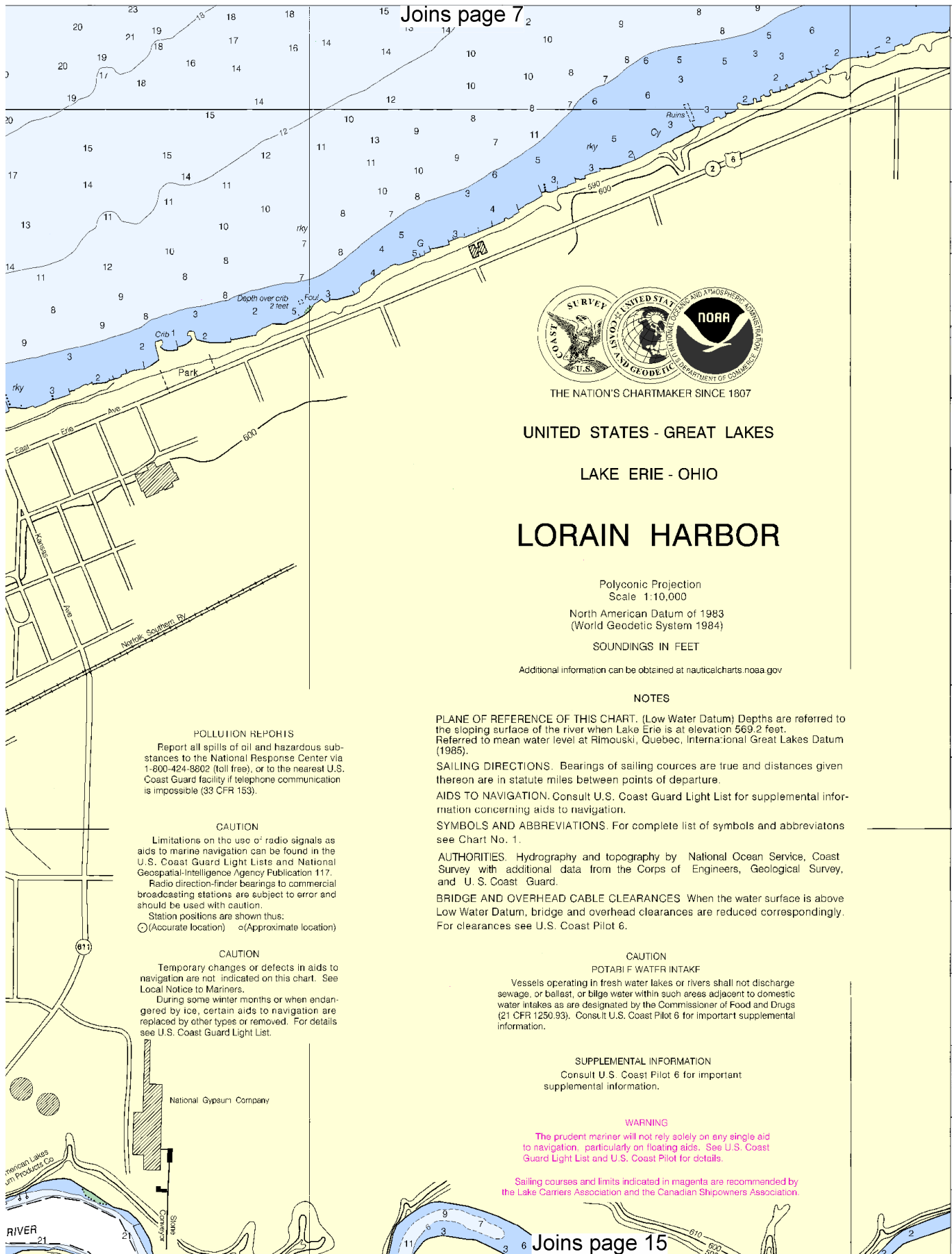
See Note on page 5.

Nautical Miles

Yards

200 0 200 400 600 800 1000 1200





UNITED STATES - GREAT LAKES

LAKE ERIE - OHIO

LORAIN HARBOR

Polyconic Projection
Scale 1:10,000

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET

Additional information can be obtained at nauticalcharts.noaa.gov

NOTES

PLANE OF REFERENCE OF THIS CHART. (Low Water Datum) Depths are referred to the sloping surface of the river when Lake Erie is at elevation 569.2 feet. Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.

AUTHORITIES. Hydrography and topography by National Ocean Service, Coast Survey with additional data from the Corps of Engineers, Geological Survey, and U. S. Coast Guard.

BRIDGE AND OVERHEAD CABLE CLEARANCES When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light List and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
○ (Accurate location) ◐ (Approximate location)

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

CAUTION

POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

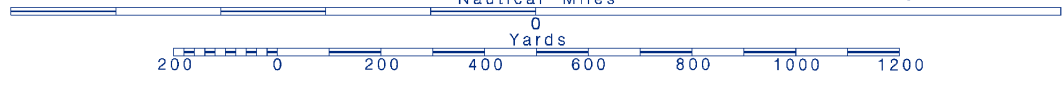
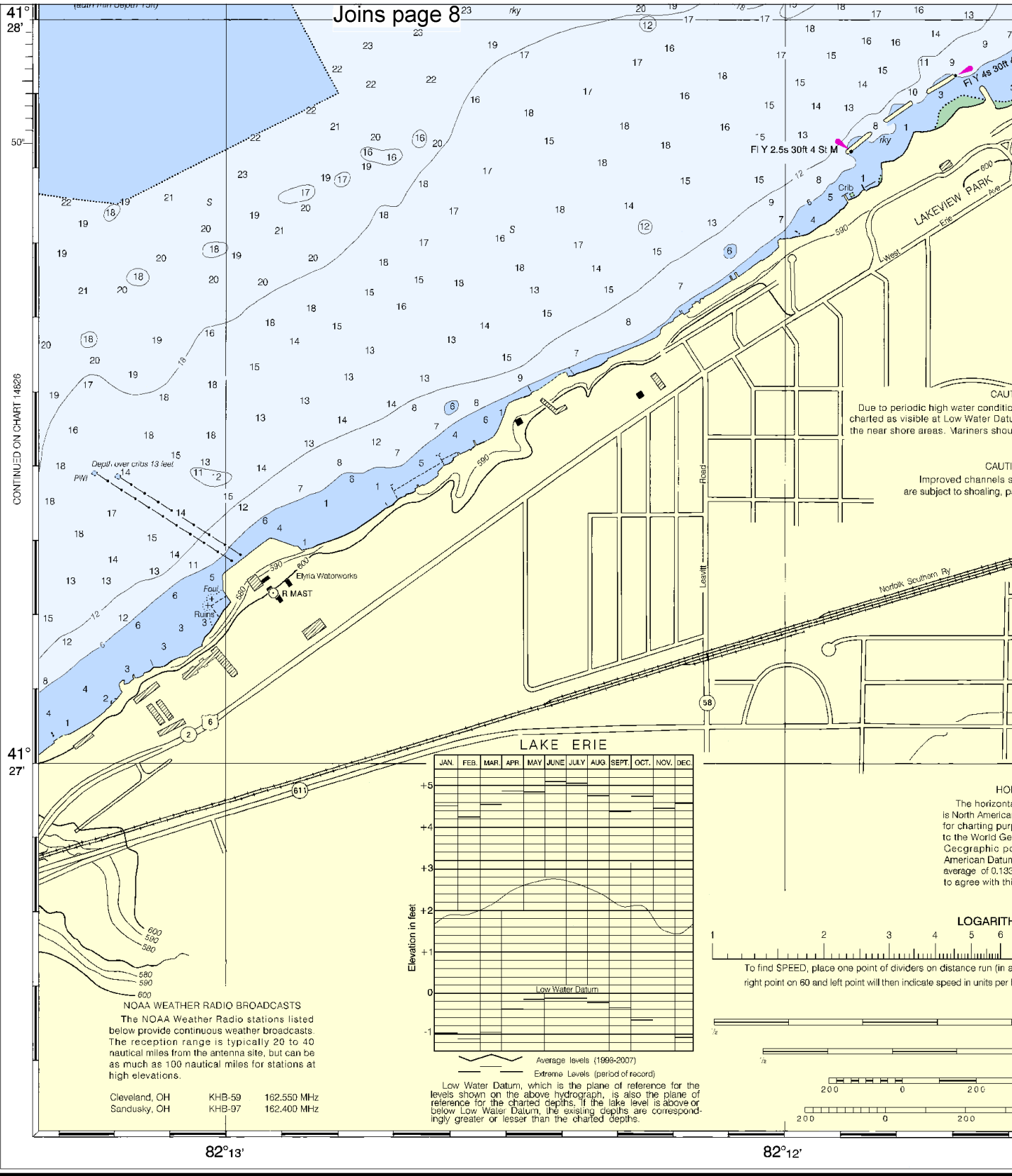
SUPPLEMENTAL INFORMATION

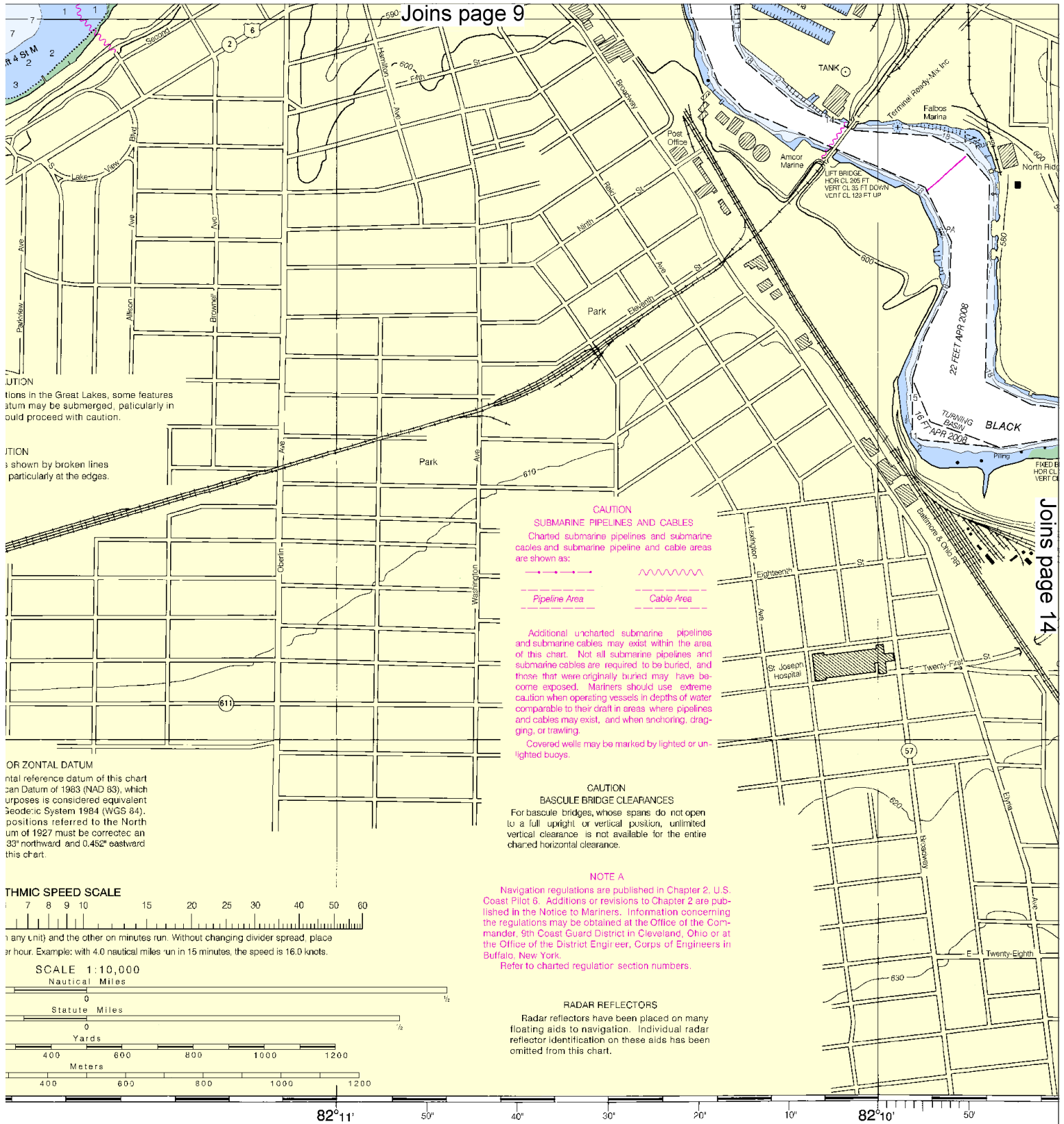
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WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

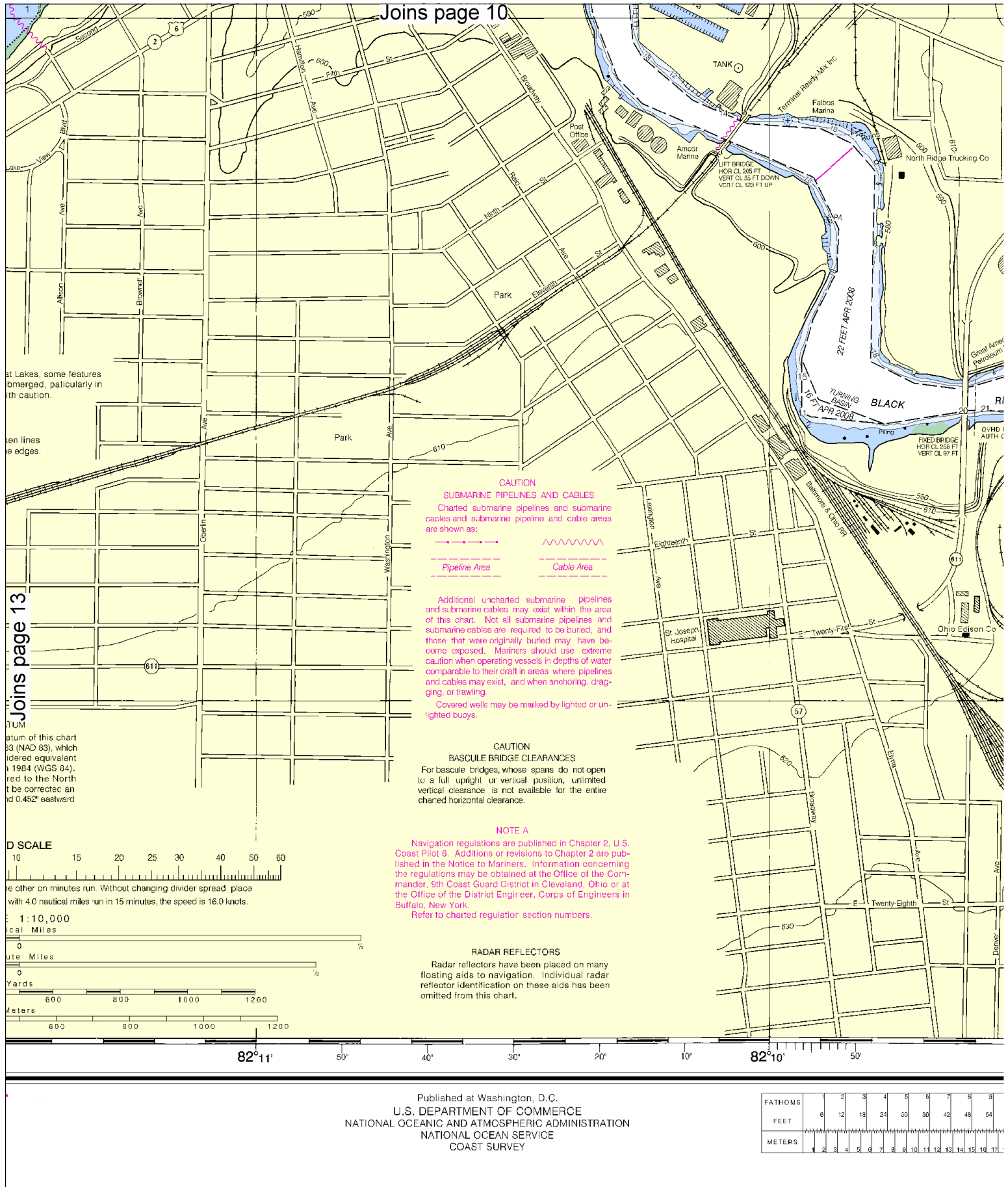




FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS	1	2	3	4	5	6
FEET	6	12	18	24	30	36
METERS	1	2	3	4	5	6



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Joins page 11

BREVIACTIONS. For complete list of symbols and abbreviations see Chart No. 1.

AUTHORITIES. Hydrography and topography by National Ocean Service, Coast Survey with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

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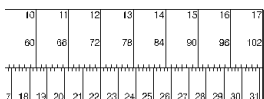
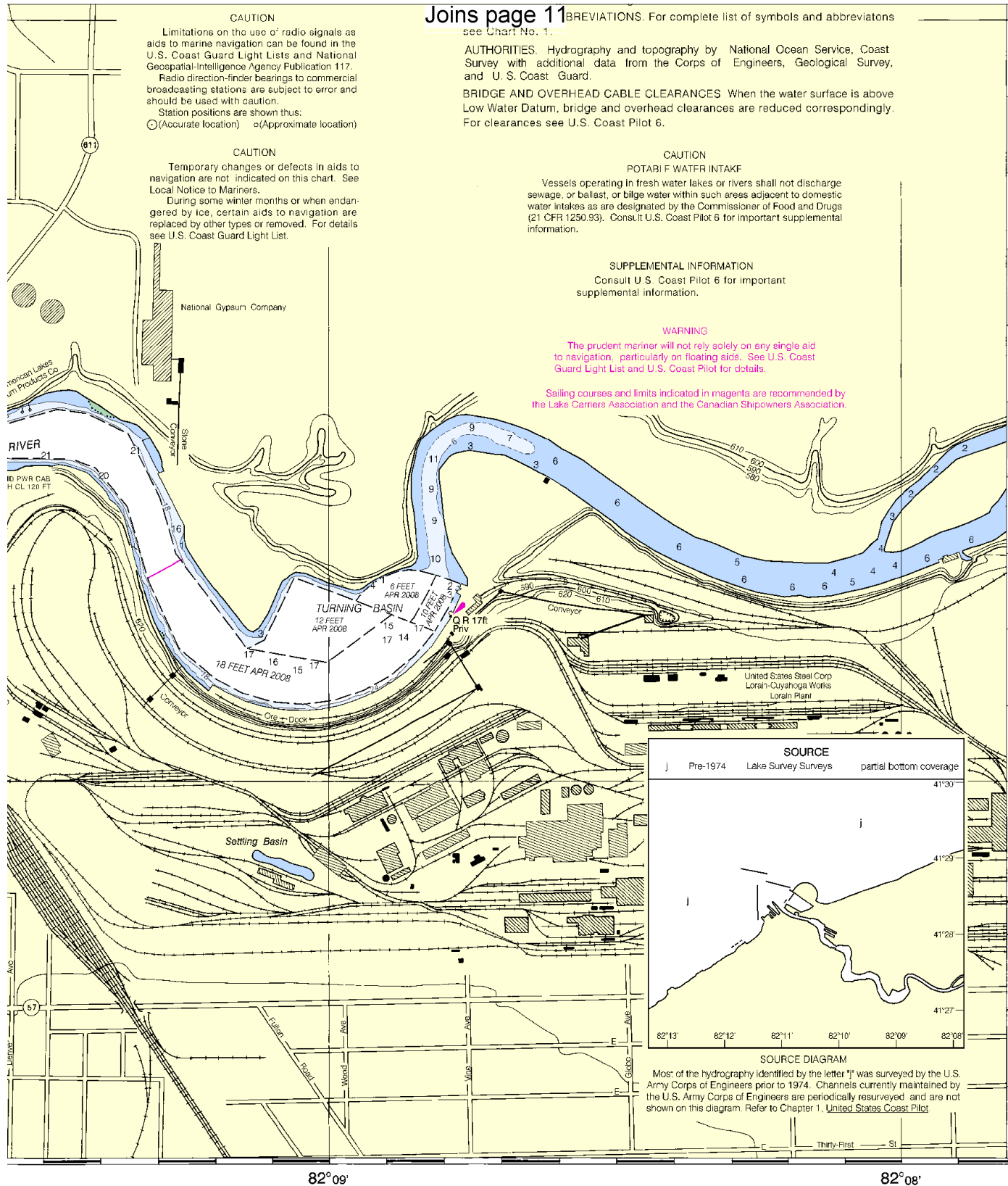
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Lorain Harbor
SOUNDINGS IN FEET - SCALE 1:10,000

NSN 7642014010662
NGA REFERENCE NO. 14XHA14841

ED. NO. 29

14841

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue (RCC) – 216-902-6117

Coast Guard Search & Rescue (Detroit) – 313-568-9524 or 313-568-9560

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENC[®]) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.